УДК 025:004.8(477)

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COMPETENCIES OF LIBRARIANS IN THE CONTEXT OF IMPLEMENTING ARTIFICIAL INTELLIGENCE SERVICES

Abstract. This paper examines the competencies required by librarians for the effective implementation of artificial intelligence (AI) services within Ukrainian libraries. The author argues that technological, analytical, cultural-educational, communicative, service-oriented, ethical, and prognostic skills form the foundation for the modernisation of library practices. These competencies are essential for delivering personalised services, fostering interactive community engagement, and promoting library activities within the digital environment. The key challenges for contemporary librarianship in Ukraine include a psychological resistance to AI adoption, insufficient staff training, funding constraints, and the imperative to standardise library processes. The author identifies that overcoming these challenges requires the organisation of systematic professional development, the introduction of interdisciplinary educational programmes for librarians, enhanced international cooperation, and the integration of libraries into global information networks.

Keywords: artificial intelligence services, librarianship, librarian competencies, digital transformation, strategic development of libraries.

The contemporary stage of library development is characterised by the active implementation of artificial intelligence (AI) technologies, which are transforming traditional models of library operation. Libraries are no longer merely repositories of knowledge but are increasingly evolving into interactive cultural, educational, and information centers. Within the context of society's digital transformation, librarians have become key agents of change, since the effectiveness of integrating intelligent services into practice depends upon their professional competencies. In addition to specialised knowledge in the field of librarianship, library employees must also be well-versed in related disciplines such as IT, jurisprudence, cultural studies, pedagogy, psychology, and sociology [1, p. 3]. N. Korzhyk underscores the importance of proficiency in information-computer and internet technologies for library professionals, enabling them to «acquire skills necessary to meet the requirements of contemporary personnel portals: to be able to work remotely; to enhance knowledge of the fundamentals of IT; to manage large-scale digital archives; and to possess computer and network literacy» [2, p. 13].

The professional standard 'Core Competencies for Cataloguing and Metadata' defines the essential skills for cataloguers and metadata specialists. It stresses that modern cataloguing librarians must combine a profound knowledge of standards and technologies with practical data-handling skills and a high level of communicative and cultural sensitivity. This ensures high-quality user access to information resources and promotes inclusive practices within the library environment [3, pp. 5–7].

The official NASIG competency standard addresses the key competencies of librarians in the field of scholarly communication. It summarises the requirements for specialists engaged in the creation, dissemination, and preservation of scholarly works, defining their personal attributes, fundamental knowledge (open access, copyright, digital preservation, metadata), and technical skills – such as the ability to operate repository and publishing platforms, as well as data management systems – alongside their capacity for outreach, educational activity, and team development [4].

A generalised model of professional requirements for public library staff in the state of Ohio is presented in the document 'Ohio Public Library Core Competencies'. This framework identifies key competency domains encompassing knowledge of library services, the ability to work with information resources and technologies, communication and user-service skills, as well as managerial and organisational abilities. The document emphasises the importance of continuous professional development, adaptability, community orientation, and the capacity to ensure equitable access to information amidst digital transformation [5].

The relevance of this study is determined by the expanding role of artificial intelligence in collection development, cataloguing, the creation of electronic resources, and the enhancement of operational efficiency in libraries. Furthermore, it addresses the evolution of their cultural-educational functions, the increasing demand for personalised services – which presuppose automated literature selection, integration into interlibrary databases, and seamless access to electronic resources – and the necessity of promoting libraries effectively within the digital environment.

The digital transformation of the library sector highlights the urgent need to develop new professional competencies among librarians [6, p. 61]. The integration of artificial intelligence (AI) services into library activities requires not only technical proficiency but also the capacity for interdisciplinary thinking, strategic planning, and effective user communication. The core competencies for modern library staff comprise the following:

– ***information-technological competence:*** knowledge of AI operating principles and the ability to apply intelligent services for cataloguing, resource digitisation, database creation, and the optimisation of internal workflows;

– ***analytical competence:*** the capacity to systematise information flows, evaluate the effectiveness of AI integration, conduct data monitoring, and formulate evidence-based conclusions for the library's strategic development;

– ***cultural-educational competence:*** the ability to leverage AI in designing cultural and educational programmes, workshops, career-orientation sessions, and psychological assessments, thereby enhancing the library's function as a cultural hub;

– ***communicative competence:*** the ability to foster interactive engagement with the community via digital platforms and social media, employing AI to generate news content, announcements, and visual reports;

– ***service competence:*** the provision of personalised reader services, including the automated generation of bibliographic records, literature selection for research, assignment of classification indices, and integration into interlibrary databases;

– ***ethical and legal competence:*** awareness of copyright issues, personal data protection, information reliability, and the responsible use of intelligent technologies in library practice;

– ***prognostic competence:*** the ability to anticipate trends in the library sector amid ongoing digitalisation and to identify promising avenues for research and innovation.

The development of librarian competencies for the effective implementation of AI services is hindered by a series of systemic challenges, both psychological and organisational. Foremost among these is the psychological resistance to new technologies, manifested in fears of human labour being replaced by algorithms, distrust of automated solutions, and a lack of confidence in one's digital proficiency. Addressing this requires creating a supportive educational environment that fosters a positive attitude towards innovation and demonstrates the practical benefits of AI in daily practice.

Insufficient staff training necessitates specialised educational programmes that bridge library science with the fundamentals of digital humanities, information technology, and data ethics. The introduction of interdisciplinary courses is essential, enabling librarians to operate at the intersection of the humanities and technical sciences. Moreover, limited funding within the library sector complicates access to modern technologies and AI tools. This requires the pursuit of alternative support sources, such as grant programmes, partnerships with universities and IT companies, and the engagement of local communities in investing in the development of libraries as cultural hubs.

The need for the standardisation of digital processes concerns the unification of electronic resource formats, catalogues, and databases, thereby ensuring interoperability across different library systems and integration into global information networks. Without such standardisation, the implementation of AI may lead to the fragmentation of the information space and a decline in the quality and effectiveness of user services.

Overcoming the aforementioned challenges requires: (a) systematic training to develop practical skills in working with intelligent services; (b) interdisciplinary educational programmes that integrate library science, IT, and the social sciences; (c) international cooperation to facilitate the exchange of expertise and the adaptation

of best practices; and (d) integration into global information networks, which provides essential access to resources, technologies, and collaborative projects.

In conclusion, the implementation of artificial intelligence services in library practice necessitates new professional competencies for librarians, encompassing technological, analytical, cultural-educational, communicative, service-oriented, ethical, and prognostic skills. These competencies ensure the effective utilisation of intelligent technologies in collection development, reader services, event management, and the promotion of library activities within the digital environment. Ultimately, they emerge as a strategic resource that guarantees technological modernisation, the seamless integration of libraries into the contemporary information space, and the reinforcement of their social mission.

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